OIPE

RAW SEQUENCE LISTING   DATE: 03/13/2002
PATENT APPLICATION: US/09/835,976A   TIME: 11:47:11

Input Set : A:\EP.txt
Output Set: N:\CRF3\03132002\I835976A.raw

Does Not Comply
Corrected Diskette Needed

```
   3 <110> APPLICANT: Mount, David B.
   4         Delpire, Eric
   5         Gamba, Gerardo
   6         Alfred L. George, Jr.
   8 <120> TITLE OF INVENTION: PURIFIED AND ISOLATED POTASSIUM-CHLORIDE COTRANSPORTER
NUCLEIC ACIDS AND
   9         POLYPEPTIDES AND
  10         THERAPEUTIC AND SCREENING METHODS USING SAME
  12 <130> FILE REFERENCE: Attorney Docket No. 1242-26-2
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/835,976A
C--> 15 <141> CURRENT FILING DATE: 2001-04-16
  17 <160> NUMBER OF SEQ ID NOS: 131
  19 <170> SOFTWARE: PatentIn Ver. 2.1
```

ERRORED SEQUENCES

```
4075 <210> SEQ ID NO: 14
4076 <211> LENGTH: 1083
4077 <212> TYPE: PRT
4078 <213> ORGANISM: mouse
4080 <220> FEATURE:
4081 <221> NAME/KEY: misc_feature
4082 <222> LOCATION: (71)
4083 <223> OTHER INFORMATION: Xaa=Leu or Ile
4085 <220> FEATURE:
4086 <221> NAME/KEY: misc_feature
4087 <222> LOCATION: (467)
4088 <223> OTHER INFORMATION: Xaa=Leu or Ile
4090 <220> FEATURE:
4091 <221> NAME/KEY: misc_feature
4092 <222> LOCATION: (639)
4093 <223> OTHER INFORMATION: Xaa=Leu or Ile
4095 <400> SEQUENCE: 14
4096 Met Pro Thr Asn Phe Thr Val Val Pro Val Glu Ala Arg Ala Asp Gly
4097  1               5                  10                  15
4099 Ala Gly Asp Glu Ala Ala Glu Arg Thr Glu Glu Pro Glu Ser Pro Glu
4100             20                  25                  30
4102 Ser Val Asp Gln Thr Ser Pro Thr Pro Gly Asp Gly Asn Pro Arg Glu
4103         35                  40                  45
4105 Asn Ser Pro Phe Ile Asn Asn Val Glu Val Glu Arg Glu Ser Tyr Phe
4106         50                  55                  60
4108 Glu Gly Lys Asn Met Ala Xaa Phe Glu Glu Glu Met Asp Ser Asn Pro
4109 65                  70                  75                  80
```

(handwritten annotations:)
pp 1-4.

what about Xaa at location 155? (p.2)

what about Xaa at location 586? (p.3)

what about Xaa at location 1023? (p.4)

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```
      4111 Met Val Ser Ser Leu Leu Asn Lys Leu Ala Asn Tyr Thr Asn Leu Ser
      4112                 85                  90                  95
      4114 Gln Gly Val Val Glu His Glu Glu Asp Glu Asp Ser Arg Arg Arg Glu
      4115             100             105             110
      4117 Val Lys Ala Pro Arg Met Gly Thr Phe Ile Gly Val Tyr Leu Pro Cys
      4118         115             120             125
      4120 Leu Gln Asn Ile Leu Gly Val Ile Leu Phe Leu Arg Leu Thr Trp Ile
      4121     130             135             140
W--> 4123 Val Gly Ala Ala Gly Val Met Glu Ser Phe Xaa Ile Val Ala Met Cys
      4124 145             150             155                 160
      4126 Cys Thr Cys Thr Met Leu Thr Ala Ile Ser Met Ser Ala Ile Ala Thr
      4127             165             170             175
      4129 Asn Gly Val Val Pro Ala Gly Gly Ser Tyr Tyr Met Ile Ser Arg Ser
      4130             180             185             190
      4132 Leu Gly Pro Glu Phe Gly Gly Ala Val Gly Leu Cys Phe Tyr Leu Gly
      4133             195             200             205
      4135 Thr Thr Phe Ala Gly Ala Met Tyr Ile Leu Gly Thr Ile Glu Ile Phe
      4136         210             215             220
      4138 Leu Thr Tyr Ile Ser Pro Ser Ala Ala Ile Phe Gln Ala Glu Thr Ala
      4139 225             230             235             240
      4141 Asp Gly Glu Ala Ala Ala Leu Leu Asn Asn Met Arg Val Tyr Gly Ser
      4142             245             250             255
      4144 Cys Ala Leu Ala Leu Met Ala Val Val Val Phe Val Gly Val Lys Tyr
      4145             260             265             270
      4147 Val Asn Lys Leu Ala Leu Val Phe Leu Ala Cys Val Val Leu Ser Ile
      4148         275             280             285
      4150 Leu Ala Ile Tyr Ala Gly Val Ile Lys Thr Ala Phe Ala Pro Pro Asp
      4151         290             295             300
      4153 Ile Pro Val Cys Leu Leu Gly Asn Arg Thr Leu Ala Asn Arg Asn Phe
      4154 305             310             315             320
      4156 Asp Thr Cys Ala Lys Met Gln Val Val Ser Asn Gly Thr Val Thr Thr
      4157             325             330             335
      4159 Ala Leu Trp Arg Leu Phe Cys Asn Gly Ser Ser Leu Gly Ala Thr Cys
      4160             340             345             350
      4162 Asp Glu Tyr Phe Ala Gln Asn Asn Val Thr Glu Ile Gln Gly Ile Pro
      4163         355             360             365
      4165 Gly Val Ala Ser Gly Val Phe Leu Asp Asn Leu Trp Ser Thr Tyr Ser
      4166     370             375             380
      4168 Asp Lys Gly Ala Phe Val Glu Lys Lys Gly Val Ser Ser Val Pro Val
      4169 385             390             395             400
      4171 Ser Glu Glu Ser Arg Pro Gly Gly Leu Pro Tyr Val Leu Thr Asp Ile
      4172             405             410             415
      4174 Met Thr Tyr Phe Thr Met Leu Val Gly Ile Tyr Phe Pro Ser Val Thr
      4175             420             425             430
      4177 Gly Ile Met Ala Gly Ser Asn Arg Ser Gly Asp Leu Lys Asp Ala Gln
      4178             435             440             445
      4180 Lys Ser Ile Pro Thr Gly Thr Ile Leu Ala Ile Val Thr Thr Ser Phe
      4181     450             455             460
      4183 Ile Tyr Xaa Ser Cys Ile Val Leu Phe Gly Ala Cys Ile Glu Gly Val
```

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```
       4184 465                    470                 475                    480
       4186 Val Leu Arg Asp Lys Phe Gly Glu Ala Leu Gln Gly Asn Leu Val Ile
       4187             485                 490                 495
       4189 Gly Met Leu Ala Trp Pro Ser Pro Trp Val Ile Val Ile Gly Ser Phe
       4190             500                 505                 510
       4192 Phe Ser Thr Cys Gly Ala Gly Leu Gln Ser Leu Thr Gly Ala Pro Arg
       4193         515                 520                 525
       4195 Leu Leu Gln Ala Ile Ala Arg Asp Gly Ile Ile Pro Phe Leu Gln Val
       4196     530                 535                 540
       4198 Phe Gly His Gly Lys Ala Asn Gly Glu Pro Thr Trp Ala Leu Leu Leu
       4199 545                 550                 555                 560
       4201 Thr Ala Leu Ile Cys Glu Thr Gly Ile Leu Ile Ala Ser Leu Asp Ser
       4202             565                 570                 575
W--> 4204 Val Ala Pro Ile Leu Ser Met Phe Phe Xaa Met Cys Tyr Met Phe Val
       4205         580                 585                 590
       4207 Asn Leu Ala Cys Ala Val Gln Thr Leu Leu Arg Thr Pro Asn Trp Arg
       4208         595                 600                 605
       4210 Pro Arg Phe Lys Phe Tyr His Trp Thr Leu Ser Phe Leu Gly Met Ser
       4211     610                 615                 620
W--> 4213 Leu Cys Leu Ala Leu Met Phe Ile Cys Ser Trp Tyr Tyr Ala Xaa Phe
       4214 625                 630                 635                 640
       4216 Ala Met Leu Ile Ala Gly Cys Ile Tyr Lys Tyr Ile Glu Tyr Arg Gly
       4217             645                 650                 655
       4219 Ala Glu Lys Glu Trp Gly Asp Gly Ile Arg Gly Leu Ser Leu Asn Ala
       4220             660                 665                 670
       4222 Ala Arg Tyr Ala Leu Leu Arg Val Glu His Gly Pro Pro His Thr Lys
       4223         675                 680                 685
       4225 Asn Trp Arg Pro Gln Val Leu Val Met Leu Asn Leu Asp Ser Glu Gln
       4226     690                 695                 700
       4228 Cys Val Lys His Pro Arg Leu Leu Ser Phe Thr Ser Gln Leu Lys Ala
       4229 705                 710                 715                 720
       4231 Gly Lys Gly Leu Thr Ile Val Gly Ser Val Leu Glu Gly Thr Tyr Leu
       4232             725                 730                 735
       4234 Asp Lys His Val Glu Ala Gln Arg Ala Glu Glu Asn Ile Arg Ser Leu
       4235         740                 745                 750
       4237 Met Ser Ala Glu Lys Thr Lys Gly Phe Cys Gln Leu Val Val Ser Ser
       4238         755                 760                 765
       4240 Asn Leu Arg Asp Gly Ala Ser His Leu Ile Gln Ser Ala Gly Leu Gly
       4241     770                 775                 780
       4243 Gly Met Lys His Asn Thr Val Leu Met Ala Trp Pro Glu Ala Trp Lys
       4244 785                 790                 795                 800
       4246 Glu Ala Asp Asn Pro Phe Ser Trp Lys Asn Phe Val Asp Thr Val Arg
       4247             805                 810                 815
       4249 Asp Thr Thr Ala Ala His Gln Ala Leu Leu Val Ala Lys Asn Ile Asp
       4250         820                 825                 830
       4252 Leu Phe Pro Gln Asn Gln Glu Arg Phe Ser Asp Gly Asn Ile Asp Val
       4253         835                 840                 845
       4255 Trp Trp Ile Val His Asp Gly Gly Met Leu Met Leu Leu Pro Phe Leu
       4256     850                 855                 860
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

```
     4258 Leu Arg Gln His Lys Val Trp Arg Lys Cys Arg Met Arg Ile Phe Thr
     4259 865             870             875             880
     4261 Val Ala Gln Val Asp Asp Asn Ser Ile Gln Met Lys Lys Asp Leu Gln
     4262             885             890             895
     4264 Met Phe Leu Tyr His Leu Arg Ile Ser Ala Glu Val Glu Val Val Glu
     4265         900             905             910
     4267 Met Val Glu Asn Asp Ile Ser Ala Phe Thr Tyr Glu Lys Thr Leu Met
     4268         915             920             925
     4270 Met Glu Gln Arg Ser Gln Met Leu Lys Gln Met Gln Leu Ser Lys Asn
     4271     930             935             940
     4273 Glu Arg Glu Arg Glu Ala Gln Leu Ile His Asp Arg Asn Thr Ala Ser
     4274 945             950             955             960
     4276 His Thr Thr Ala Thr Ala Arg Thr Gln Ala Pro Pro Thr Pro Asp Lys
     4277             965             970             975
     4279 Val Gln Met Thr Trp Thr Lys Glu Lys Leu Ile Ala Glu Lys His Arg
     4280         980             985             990
     4282 Asn Lys Asp Thr Gly Pro Ser Gly Phe Lys Asp Leu Phe Ser Leu Lys
     4283         995             1000            1005
W--> 4285 Pro Asp Gln Ser Asn Val Arg Arg Met His Thr Ala Val Lys (Xaa)Asn
     4286     1010            1015            1020
     4288 Gly Val Val Leu Asn Lys (S)er Gln Asp Ala Gln (L)eu Val Leu Leu Asn
E--> 4289 1025            ←1030           ←1035             ←1040      see below
     4291 Met Pro Gly Pro Pro Lys Ser Arg Gln Gly Asp Glu Asn Tyr Met Glu
     4292             1045            1050            1055
     4294 Phe Leu Glu Val Leu Thr Glu Gly Leu Asn Arg Val Leu Leu Val Arg
E--> 4295     1060            1065            1070
     4297 Gly Gly Gly Arg Glu Val Ile Thr Ile Tyr Ser
     4298         1075            1080
```

1) begin the amino acid number *directly below* the first letter of the amino acid. Do not have any part of the number under the letters of the next amino acid,

e.g. Lys |space| Ser
     1030

2). When numbering the last amino acid on a line, please end the number directly below the last letter of the amino acid

Leu |space| Asn
          1040

VERIFICATION SUMMARY
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```
L:14 M:270 C: Current Application Number differs, Replaced Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2738 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:2982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:3063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:3143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
```

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Input Set : **A:\EP.txt**
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```
L:3343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3524 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:3569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:4289 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:14
M:332 Repeated in SeqNo=14
L:6706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:111
L:6834 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:112
L:7185 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:131
```